UTAH COUNTY BOARD OF HEALTH

Resolution 14-04

TITLE: Amend Utah County Health Department Regulation governing design, construction and operation of public pools, interactive water features - Regulation 09-01

AUTHOR: Bryce C. Larsen, Division of Environmental Health, Utah County Health Department

REFERRED TO: Utah County Board of Health

Whereas, regulation governing the design, construction and operation of public pools and interactive water features was adopted by the Utah County Board of Health on March 23, 2009 for the purpose of regulating public swimming pools, and interactive water features within Utah County, and

Whereas, the Utah Department of Health has adopted State Rules R392-302 and R392-303, Design, Construction and Operation of Public Pools effective July 1, 2013 which affects the design, construction and operation of public pools and interactive water features, and

Whereas, under Utah Code 26A-1-108, the Utah County Health Department is required to enforce state health laws, and

Whereas Utah State Rule R392-302 and R392-303, Design, Construction and Operation of Public Pools accomplishes similar purposes as the Utah County Health Department regulation governing design, construction and operation of public pools and interactive water features therefore, be it

Resolved, the Utah County Health Department regulation governing design, construction and operation of public pools and interactive water features, regulation 09-01, adopted by the Utah County Board of Health on March 23, 2009 is hereby amended as attached here to.

Approved and adopted January 27, 2014
Date

Doug Witney, Chair
Utah County Board of Health

Joseph K. Miner, Executive Director
Utah County Health Department

Utah County Health Department

Health Regulation 09-01

Design, Construction and Operation of Public Pools and Interactive Water Features

Adopted by the Utah County Board of Health

March 23, 2009

Amended January 27, 2014

Under the Authority of Utah Code 26a-1-211

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1.0 Purpose

The purpose of this regulation is to protect the public health by increasing the safety of public pools and interactive water features. This regulation incorporates by reference the Utah Department of Health's "Design, Construction and Operation of Public Pools" rule, R392-302 and R392-303 of the Utah Administrative Code, and adds provisions clarifying the Utah County Health Department's regulatory authority; and adopts requirements for interactive water features.

2.0 General Requirements Applicable to Public Pools

2.1 The Utah Department of Health's rule governing "Design, Construction and Operation of Public Pools," R392-302 and R392-303 of the Utah Administrative Code, is hereby incorporated by reference.

2.2 No person shall commence construction of a public pool, or change the construction, equipment, or appurtenances of any existing public pool, without first obtaining approval therefore from the Utah County Health Department. No construction work shall be commenced until a construction permit has been issued by the Utah County Health Department.

2.3 Before a construction permit is granted, the applicant shall submit complete plans and specifications, certified by an engineer or architect licensed to practice in the State of Utah, to the effect that the plans and specifications meet the requirements of this regulation. A minimum of two copies of the plans and specifications shall be submitted with the accompanying fee.

2.4 At least one set of plans bearing the approved stamp of the Utah County Health Department shall be available on the construction site at all times during construction. The pool and facilities shall conform to and be built in accordance with such plans unless prior approval of changes has been given in writing by the Utah County Health Department.

2.5 The owner or contractor shall notify the Utah County Health Department at specific stages of construction predetermined by the Utah County Health Department, and at the time of completion of the pool, to permit adequate inspection of the pool and related equipment. The pool shall not be placed in operation until such inspection shows compliance with the requirements of this regulation.

2.6 Variances from the design and construction requirements of this regulation may be approved by the Utah County Health Department if approved by the Utah County Board of Health.

2.7 No person shall operate a public pool without a valid operating permit from the Utah County Health Department. Permits shall cover the calendar year in which the permit is issued, expiring the 31st day of December of the year of issuance. No permit is transferable from one operator to another.

2.8 Hydrotherapy pools are issued an operating permit and regulated by the Utah County Health Department to the extent allowed by R392-302-31(4) "Hydrotherapy Pools."

2.9 The Utah County Health Department is authorized to conduct such inspections as it deems necessary to insure compliance with the provisions of these regulations, and shall have right to entry at any reasonable hour to public pools for this purpose.

2.10 Fees may be charged to the owner or operator for all inspections and services necessary for the enforcement of this regulation and shall be paid to the Utah County Health Department prior to the inspection or service. Fees shall be set and adjusted as needed by the Utah County Board of Health.

2.11 An operating permit may be suspended or revoked by the Utah County Health Department when there are willful or repeated violations of this regulation, or when it appears that the violation is of such a nature as to immediately harm the public health or safety.

2.12 A person whose permit has been suspended or revoked may request a hearing with the local health officer, as provided in Utah Code § 26A-1-121. The request must be made in writing to the local health officer within 10 days after notice of the local health department's action. Unless a timely request for a hearing is made, the decision of the Utah County Health Department to suspend or revoke the permit is final.

2.13 The Utah County Health Department may request that a city attorney or the Utah County Attorney, as appropriate, take criminal or civil legal action to enforce the provisions of this regulation. Violation of this regulation is a misdemeanor under Utah Code § 26A-1-123.

3.0 Authority and Effective Date

Adoption of this regulation is authorized by Utah Code 26a-1-211. This regulation becomes effective upon approval by the Utah County Board of Health.

Approved and adopted March 23, 2009.

Amendments approval adopted January 27, 2014

Commissioner Doug Witney - Chair
Utah County Board of Health

Joseph K. Miner, M.D., Executive Director
Utah County Health Department

NOTE: For a list of rules that have been made effective since July 1, 2013, please see the codification segue page.

NOTE TO RULEFILING AGENCIES: Use the RTF version for submitting rule changes.

Download the RTF file

R392. Health, Disease Control and Prevention, Environmental Services.

Rule R392-302. Design, Construction and Operation of Public Pools.

As in effect on July 1, 2013

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(8) "High Bather Load" means 90% or greater of the designed maximum bather load."

(9) "Hydrotherapy Pool" means a pool designed primarily for medically prescribed therapeutic use.

(10) "Illuminance Uniformity" means the ratio between the brightest illuminance falling on a surface compared to the lowest illuminance falling on a surface within an area. The value of illuminance falling on a surface is measured in foot candles.

(11) "Interactive Water Feature" means a recirculating water feature designed, installed or used for recreational use, in which there is direct water contact from the feature with the public, and when not in operation, all water drains freely so there is no ponding.

(12) "Lamp Lumens" means the quantity of light, illuminance, produced by a lamp.

(13) "Lifeguard" means an attendant who supervises the safety of bathers.

(14) "Living Unit" means one or more rooms or spaces that are, or can be, occupied by an individual, group of individuals, or a family, temporarily or permanently for residential or overnight lodging purposes. Living units include motel and hotel rooms, condominium units, travel trailers, recreational vehicles, mobile homes, single family homes, and individual units in a multiple unit housing complex.

(15) "Local Health Officer" means the health officer of the local health department having jurisdiction, or his designated representative.

(16) "Pool" means a man-made basin, chamber, receptacle, tank, or tub which, when filled with water, creates an artificial body of water used for swimming, bathing, diving, recreational and therapeutic uses.

(17) "Pool Deck" means the area contiguous to the outside of the pool curb, diving boards, diving towers and slides.

(18) "Pool Shell" means the rigid encasing structure of a pool that confines the pool water by resisting the hydrostatic pressure of the pool water, resisting the pressure of any exterior soil, and transferring the weight of the pool water (sometimes through other supporting structures) to the soil or the building that surrounds it.

(19) "Private Residential Pool" means a swimming pool, spa pool or wading pool used only by an individual, family, or living unit members and guests, but not serving any type of multiple unit housing complex of four or more living units.

(20) "Public Pool" means a swimming pool, spa pool, wading pool, or special purpose pool facility which is not a private residential pool.

Executive Director or the Local Health Officer may order construction changes consistent with the requirements of this rule to existing facilities.

(2) This rule does not regulate any private residential pool. A private residential pool that is used for swimming instruction purposes shall not be regulated as a public pool.

(3) This rule does not regulate any body of water larger than 30,000 square feet, 2,787.1 square meters, and for which the design purpose in not swimming, wading, bathing, diving, a water slide splash pool, or children's water play activities.

R392-302-4. Water Supply.

(1) The water supply serving a public pool and all plumbing fixtures, including drinking fountains, lavatories and showers, must meet the requirements for drinking water established by the Department of Environmental Quality.

(2) All portions of water supply, re-circulation, and distribution systems serving the facility must be protected against backflow. Water introduced into the pool, either directly or through the circulation system, must be supplied through an air gap.

R392-302-5. Sewer System.

(1) Each public pool must discharge waste water to a public sanitary sewer system if the sewer system is within 300 feet of the property line. Where no public sanitary sewer system is available within 300 feet of the property line, the local health department may approve connections made to a disposal system designed, constructed, and operated in accordance with the minimum requirements of the Department of Environmental Quality.

(2) Each public pool must connect to a sewer or wastewater disposal system through an air break to preclude the possibility of sewage or waste backup into the piping system. Pools constructed and approved after December 31, 2010 shall connect to a sewer or wastewater disposal system through an air gap.

R392-302-6. Construction Materials.

(1) Each public pool and the appurtenances necessary for its proper function and operation must be constructed of materials that are inert, non-toxic to humans, impervious, enduring over time, and resist the effects of wear and deterioration from chemical, physical, radiological, and mechanical actions.

(2) All public pools shall be constructed with a pool shell that meets the requirements of this section R392-302-6. Vinyl liners that are not bonded to a pool shell are prohibited. A vinyl liner that is bonded to a pool shell shall have at least a 60 mil thickness. Sand, clay or earth walls or bottoms are prohibited.

(2) The department may make additional allowance for bathers when the facility operator can demonstrate that lounging and sunbathing patrons will not adversely affect water quality due to over-loading of the pool.

R392-302-8. Design Detail and Structural Stability.

(1) The designing architect or engineer is responsible to certify the design for structural stability and safety of the public pool.

(2) The shape of a pool and design and location of appurtenances must be such that the circulation of pool water and control of swimmer's safety are not impaired. The designing architect or engineer shall designate sidewalls and endwalls on pool plans.

(3) A pool must have a circulation system with necessary treatment and filtration equipment as required in R392-302-16, unless turnover rate requirements as specified in sub-section R392-302-16(1) can be met by continuous introduction of fresh water and wasting of pool water under conditions satisfying all other requirements of this rule.

(4) Where a facility is subject to freezing temperatures, all parts of the facility subject to freezing damage must be adequately and properly protected from damage due to freezing, including the pool, piping, filter system, pump, motor, and other components and systems.

(5) The pool operator or the designing architect or engineer shall submit plans for a new pool, pool renovation or pool remodeling project to the local health department for approval. This includes the replacement of equipment which is different from that originally approved by a health authority having jurisdiction. The local health department may require a pool renovation or pool remodeling project to meet the current requirements of R392-302.

R392-302-9. Depths and Floor Slopes.

(1) In determining the horizontal slope ratio of a pool floor, the first number shall indicate the vertical change in value or rise and the second number shall indicate the horizontal change in value or run of the slope.

(a) The horizontal slope of the floor of any portion of a pool having a water depth of less than 5 feet, 1.52 meters, may not be steeper than a ratio of 1 to 10 except for a pool used exclusively for scuba diving training.

(b) The horizontal slope of the floor of any portion of a pool having a water depth greater than 5 feet, 1.52 meters, must be uniform, must allow complete drainage and may not exceed a ratio of 1 to 3 except for a pool used exclusively for scuba diving training. The horizontal slope of the pool bottom in diving areas must be consistent with the

(c) An unobstructed surface shall be provided that is a minimum of 10 inches, 25 centimeters, and a maximum of 20 inches front to back, and a minimum of 24 inches,61 centimeters, wide;

(d) The pool wall under the seat or bench shall be flush with the leading edge of the seat or bench and meet the requirements of R392-302-10(1) and (2);

(e) Seats and benches may not replace the stairs or ladders required in R392-302-12, but are allowed in conjunction with pool stairs;

(f) Underwater seats may be located in the deep area of the pool where diving equipment (manufactured or constructed) is installed, provided they are located outside of the minimum water envelope for diving equipment; and

(g) A line must mark the extent of the seat or bench within 2 inches, 5.08 centimeters, of its leading edge. The line must be at least 2 inches, 5.08 centimeters, in width and in a contrasting dark color for maximum visual distinction.

R392-302-11. Diving Areas.

(1) Where diving is permitted, the diving area design, equipment placement, and clearances must meet the minimum standards established by the USA Diving Rules and Regulations 2004, Appendix B, which are incorporated by reference.

(2) Where diving from a height of less than 3.28 feet, 1 meter, from normal water level is permitted, the diving bowl shall meet the minimum depths outlined in Section 6, Figure 1 and Table 2 of ANSI/NSPI-1, 2003, which is adopted by reference, for type VI, VII and VIII pools according to the height of the diving board above the normal water level. ANSI/NSPI pool type VI is a maximum of 26 inches, 2/3 meter, above the normal water level; type VII is a maximum of 30 inches, 3/4 meter, above the normal water level; and type VIII is a maximum of 39.37 inches, 1 meter, above the normal water level.

(3) The use of a starting platform is restricted to competitive swimming events or supervised training for competitive swimming events.

(a) If starting platforms are used for competitive swimming or training, the water depth shall be at least four feet.

(b) The operator shall either remove the starting platforms or secure them with a lockable cone-type platform safety cover when not in competitive use.

(4) Areas of a pool where diving is not permitted must have "NO DIVING" or the international no diving icon, or both provided in block letters at least four inches in height in a contrasting color on the deck, located on the horizontal surface of the deck or coping as close to the water's edge as practical.

(a) Steps must have at least one handrail. The handrail shall be mounted on the deck and extend to the bottom step either attached at or cantilever to the bottom step. Handrails may also be mounted in the pool bottom of a wading area at the top of submerged stairs that lead into a swimming pool; such handrails must also extend to the bottom step either attached at or cantilever to the bottom step.

(b) Steps must be constructed of corrosion-resistant material, be easily cleanable, and be of a safe design.

(c) Steps leading into pools must be of non-slip design, have a minimum run of 10 inches, 25.4 centimeters, and a maximum rise of 12 inches, 30.48 centimeters.

(d) Steps must have a minimum width of 18 inches, 45.72 centimeters, as measured at the leading edge of the step.

(e) Steps must have a line at least 1 inch, 2.54 centimeters, in width and be of a contrasting dark color for a maximum visual distinction within 2 inches, 5.08 centimeters, of the leading edge of each step.

(4) Ladders.

(a) Pool ladders must be corrosion-resistant and must be equipped with non-slip rungs.

(b) Pool ladders must be designed to provide a handhold, must be rigidly installed, and must be maintained in safe working condition.

(c) Pool ladders shall have a clearance of not more than 5 inches, 12.7 centimeters, nor less than 3 inches, 7.62 centimeters, between any ladder rung and the pool wall.

(d) Pool ladders shall have rungs with a maximum rise of 12 inches, 30.5 centimeters, and a minimum width of 14 inches, 35.6 centimeters.

(5) Recessed Steps.

(a) Recessed steps shall have a set of grab rails located at the top of the course with a rail on each side which extend over the coping or edge of the deck.

(b) Recessed steps shall be readily cleanable and provide drainage into the pool to prevent the accumulation of dirt on the step.

(c) Full or partial recessed steps must have a minimum run of 5 inches, 12.7 centimeters, and a minimum width of 14 inches, 35.56 centimeters.

R392-302-13. Decks and Walkways.

(9) Steps serving decks must meet the following requirements:

(a) Risers of steps for the deck must be uniform and have a minimum height of 4 inches, 10.2 centimeters, and a maximum height of 7 inches, 17.8 centimeters.

(b) The minimum run of steps shall be 10 inches, 25.4 centimeters.

(c) Steps must have a minimum width of 18 inches, 45.72 centimeters.

R392-302-14. Fencing.

(1) A fence or other barrier is required and must provide complete perimeter security of the facility, and be at least 6 feet, 1.83 meters, in height. Openings through the fence or barrier, other than entry or exit access when the access is open, may not permit a sphere greater than 4 inches, 10.16 centimeters, to pass through it at any location. Horizontal members shall be equal to or more than 45 inches, 114.3 centimeters, apart.

(a) If the local health department determines that the safety of children is not compromised, it may exempt indoor pools from the fencing requirements.

(b) The local health department may grant exceptions to the height requirements in consideration of architectural and landscaping features for pools designed for hotels, motels and apartment houses.

(2) A fence or barrier that has an entrance to the facility must be equipped with a self-closing and self-latching gate or door. Except for self-locking mechanisms, self-latching mechanisms must be installed 54 inches, 1.37 meters, above the ground and must be provided with hardware for locking the gate when the facility is not in use. A lock that is separate from the latch and a self locking latch shall be installed with the lock's operable mechanism (key hole, electronic sensor, or combination dial) between 34 inches, 86.4 centimeters, and 48 inches, 1.219 meters, above the ground. All gates for the pool enclosure shall open outward from the pool.

(3) The gate or door shall have no opening greater than 0.5 inches, 1.27 centimeters, within 18 inches, 45.7 centimeters, of the latch release mechanism.

(4) Bathing areas must be separated from non-bathing areas by barriers with a minimum height of 4 feet, 1.22 meters, or by a minimum of 5 feet, 1.53 meters, distance separation.

R392-302-15. Depth Markings and Safety Ropes.

(1) The depth of the water must be plainly marked at locations of maximum and minimum pool depth, and at the points of separation between the swimming and non-swimming areas of a pool. Pools must also be marked at intermediate 1 foot, 30.48

granted by the department if the pool operator can demonstrate that the safety of the bathers is not compromised.

(a) The circulation system shall meet the minimum turnover time listed in Table 1.

(b) If a single pool incorporates more than one the pool types listed in Table 1, either:

(i) the entire pool shall be designed with the shortest turnover time required in Table 1 of all the turnover times for the pool types incorporated into the pool or

(ii) the pool shall be designed with pool-type zones where each zone is provided with the recirculation flow rate that meets the requirements of Table 1.

(c) The Health Officer may require the pool operator to demonstrate that a pool is performing in accordance with the approved design.

(d) The operator shall run circulation equipment continuously except for periods of routine or other necessary maintenance. Pumps with the ability to decrease flow when the pool has little or no use are allowed as long as the same number of turnovers are achieved in 24 hours that would be required using the turnover time listed in Table 1 and the water quality standards of R392-302-27 can be maintained. The circulation system must be designed to permit complete drainage of the system.

(e) Piping must be of non-toxic material, resistant to corrosion and be able to withstand operating pressures.

(f) Plumbing must be identified by a color code or labels.

(2) The water velocity in discharge piping may not exceed 10 feet, 3.05 meters, per second, except for copper pipe where the velocity for piping may not exceed 8 feet, 2.44 meters, per second.

(3) Suction velocity for all piping may not exceed 6 feet, 1.83 meters, per second.

(4) The circulation system must include a strainer to prevent hair, lint, etc., from reaching the pump.

(a) Strainers must be corrosion-resistant with openings not more than 1/8 inch, 3.18 millimeters, in size.

(b) Strainers must provide a free flow capacity of at least four times the area of the pump suction line.

(c) Strainers must be readily accessible for frequent cleaning.

(d) Strainers must be maintained in a clean and sanitary condition.

(11) Written operational instructions must be immediately available at the facility at all times.

TABLE 1
Circulation

Pool Type	Min. Number of Wall Inlets	Min. Number of Skimmers per 3,500 square ft. or less	Min. Turnover Time
1. Swim	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	8 hrs.
2. Swim, high bather load	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	6 hrs.
3. Wading pool	1 per 20 ft., 6.10 m. min. of 2 equally spaced	1 per 500 sq. ft. 46.45 sq. m.	1 hr.
4. Spa	1 per 20 ft., 6.10 m.	1 per 100 sq. ft., 9.29 sq. m.	0.5 hr.
5. Wave	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	6 hrs.
6. Slide	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	1 hr.
7. Vehicle slide	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	1 hr.
8. Float tank	1	1	15 min. with 2 turnovers between patrons
9. Special Purpose Pool	1 per 10 ft., 3.05 m.	1 per 500 sq. ft., 46.45 sq. m.	1 hr.

(12) Each air induction system installed must comply with the following requirements:

(4) The department may grant an exemption to the inlet placement requirements on a case by case basis for inlet designs that can be demonstrated to produce uniform mixing of pool water.

R392-302-18. Outlets.

(1) No feature or circulation pump shall be connected to less than two outlets unless the pump is connected to a gravity drain system or the pump is connected to an unblockable drain. All pool outlets shall meet the following design criteria:

(a) The grates or covers of all submerged outlets in pools shall conform to the standards of ASME A112.19.8a-2008.

(b) The outlets must be constructed so that if one of the outlets is completely obstructed, the remaining outlets and related piping will be capable of handling 100 percent of the maximum design circulation flow.

(c) All pool outlets that are connected to a pump through a single common suction line must connect to the common suction line through pipes of equal diameter. The tee feeding to the common suction line from the outlets must be located approximately midway between outlets.

(d) An outlet system with more than one outlet connected to a pump suction line must not have any valve or other means to cut any individual outlet out of the system.

(e) At least one of the circulation outlets shall be located at the deepest point of the pool and must be piped to permit the pool to be completely and easily emptied.

(f) The center of the outlet covers or grates of multiple main drain outlets shall not be spaced more than 30 feet, 9.14 meters, apart nor spaced closer than 3 feet, 0.914 meters, apart.

(g) Multiple pumps may utilize the same outlets only if the outlets are sized to accommodate 100 percent of the total combined design flow from all pumps and only if the flow characteristics of the system meet the requirements of subsection R392-302-18(2) and (3).

(h) There must be one main drain outlet for each 30 feet, 9.14 meters, of pool width. The centers of the outlet covers or grates of any outermost main drain outlets must be located within 15 feet, 4.57 meters, of a side wall.

(i) Devices or methods used for draining pools shall prevent overcharging the sanitary sewer.

(j) No operator shall allow the use of a pool with outlet grates or covers that are broken, damaged, missing, or not securely fastened.

audible alarm that can be heard in all areas of the pool or a continuous visible alarm that can be seen in all areas of the pool. An easily readable sign shall be posted next to the sound or visible alarm source. The sign shall state, "DO NOT USE THE POOL IF THIS ALARM IS ACTIVATED." and provide the phone number of the pool operator.

(iii) No operator shall allow the use of a pool that has a single drain with a safety vacuum release system if the safety vacuum release system is not functioning properly.

(b) Install an outlet system that includes no fewer than two suction outlets separated by no less than 3 feet, 0.914 meters, on the horizontal plane as measured from the centers of the drain covers or grates or located on two different planes and connected to pipes of equal diameter. The outlet system shall meet the requirements of R392- 302-18(1)(a) through R392-302-18(1)(g) and 18(2) through (3)(c);

(c) Meet the requirements of R392-302-18(1)(a) and R392-302-18(2) through (3)(c) and installing (or having an existing) gravity drain system;

(d) Install an unblockable drain that meets the requirements of R392-302-18(1)(a) and R392-302-18(2) through (3)(c); or

(e) Any other system determined by the federal Consumer Products Safety Commission to be equally effective as, or better than, the systems described in 15 USC 8003 (c)(1)(A)(ii)(I), (III), or (IV) at preventing or eliminating the risk of injury or death associated with pool drainage systems.

R392-302-19. Overflow Gutters and Skimming Devices.

(1) A pool having a surface area of over 3,500 square feet, 325.15 square meters, must have overflow gutters. A pool having a surface area equal to or less than 3,500 square feet, 325.15 square meters, must have either overflow gutters or skimmers provided.

(2) Overflow gutters must extend completely around the pool, except at steps, ramps, or recessed ladders. The gutter system must be capable of continuously removing pool water at 100 percent of the maximum flow rate. This system must be connected to the circulation system by means of a surge tank.

(3) Overflow gutters must be designed and constructed in compliance with the following requirements:

(a) The opening into the gutter beneath the coping or grating must be at least 3 inches, 7.62 centimeters, in height with a depth of at least 3 inches, 7.62 centimeters.

(b) Gutters must be designed to prevent entrapment of any part of a bather's body.

(c) The edge must be rounded so it can be used as a handhold and must be no thicker than 2.5 inches, 6.35 centimeters, for the top 2 inches, 5.08 centimeters.

(c) This pipe must be located at least 1 foot, 30.48 centimeters, below a valve or equivalent device that will remain tightly closed under normal operating conditions. In a shallow pool, such as a wading pool, where an equalizer outlet can not be submerged at least one foot below the skimmer valve, the equalizer pipe shall be connected to a separate dedicated outlet with an anti-entrapment outlet cover in the floor of the pool that meets the requirements of ASME A112.19.8a-2008; and

(d) The equalizer pipe must be protected with a cover or grate that meets the requirements of ASME A112.19.8a-2008 and is sized to accommodate the design flow requirement of R392-302-19(5).

(9) The operator shall maintain proper operation of all skimmer weirs, float valves, check valves, and baskets. Skimmer baskets shall be maintained in a clean and sanitary condition.

(10) Where skimmers are used, a continuous handhold is required around the entire perimeter of the pool except in areas of the pool that are zero depth and shall be installed not more than 9 inches, 2.86 centimeters, above the normal operating level of the pool. The decking, coping, or other material may be used as the handhold so long as it has rounded edges, is slip-resistant, and does not exceed 3.5 inches, 8.89 centimeters, in thickness. The overhang of the coping, decking, or other material must not exceed 2 inches, 5.08 centimeters, nor be less than 1 inch, 2.54 centimeters beyond the pool wall. An overhang may be up to a maximum of 3 inches to accommodate an automatic pool cover track system.

R392-302-20. Filtration.

(1) The filter system must provide for isolation of individual filters for backwashing or other service.

(2) The filtration system must be designed to allow the pool operator to easily observe the discharge backwash water from the filter in order to determine if the filter cells are clean.

(3) A public pool must use either a rapid sand filter, hi-rate sand filter, precoat media filter, a cartridge filter or other filter types deemed equivalent by the Department. All filters must comply with the standard NSF/ANSI 50-2007.

(4) Gravity and pressure rapid sand filter requirements.

(a) Rapid sand filters must be designed for a filter rate of 3 gallons, 11.36 liters, or less, per minute per square foot, 929 square centimeters, of bed area at time of maximum head loss. The filter bed surface area must be sufficient to meet the design rate of flow required by Section R392-302-16, Table 1, for required turnover.

square foot, 7.57 liters per 929 square centimeters, of effective filtering surface without continuous body feed, nor greater than 2.5 gallons per minute per square foot, 9.46 liters per 929 square centimeters, with continuous body feed.

(b) Where body feed is provided, the feeder device must be accurate to within 10 percent, must be capable of continual feeding within a calibrated range, and must be adjustable from two to six parts per million. The device must feed at the design capacity of the circulation pump.

(c) Where fabric is used, filtering area must be determined on the basis of effective filtering surfaces.

(d) The filter and all component parts must be designed and constructed of materials which will withstand normal continuous use without significant deformation, deterioration, corrosion or wear which could adversely affect filter operations.

(e) If a precoat media filter is supplied with a potable water supply, then the water must be delivered through an air gap.

(f) The filter plant must be provided with influent pressure, vacuum, or compound gauges to indicate the condition of the filter. In vacuum-type filter installations where the circulating pump is rated at two horsepower or higher, an adjustable high vacuum automatic shut-off device must be provided to prevent damage to the pump. Air-relief valves must be provided at or near the high point of the filter system.

(g) A filter must be designed to facilitate cleaning by one or more of the following methods: backwashing, air-bump-assist backwashing, automatic or manual water spray, or agitation.

(h) The filter system must provide for complete and rapid draining of the filter.

(i) Diatomaceous earth filter backwash water must discharge to the sanitary sewer system through a separation tank. The separation tank must have a visible precautionary statement warning the user not to start up the filter pump without first opening the air relief valve.

(j) Personal protection equipment suitable for preventing inhalation of diatomaceous earth or other filter aids must be provided.

(7) The department may waive National Sanitation Foundation, NSF/ANSI 50-2007, standards for precoat media filters and approve site-built or custom-built vacuum precoat media filters, if the precoat media filter elements are easily accessible for cleaning by hand hosing after each filtering cycle. Site-built or custom-built vacuum precoat media filters must comply with all design requirements as specified in Subsection R392-302-20(6). Any design which provides the equivalent washing effectiveness as determined by the department may be acceptable. Where the

enclosures may not be below ground level. If an enclosure is a room within a building, it must be provided with vents near the floor which terminate at a location out-of-doors. Enclosures must be located to prevent contamination of air inlets to any buildings and areas used by people. Forced air ventilation capable of providing at least one complete air change per minute, must be provided for enclosures.

(b) The operator shall not keep substances which are incompatible with chlorine in the chlorine enclosure.

(c) The operator shall secure chlorine cylinders to prevent them from falling over. The operator shall maintain an approved valve stem wrench on the chlorine cylinder so the supply can be shut off quickly in case of emergency. The operator shall keep valve protection hoods and cap nuts in place except when the cylinder is connected.

(d) Doors to chlorine gas and equipment rooms must be labeled DANGER CHLORINE GAS in letters at least 4 inches, 10.16 centimeters, in height and display the United States Department of Transportation placard and I.D. number for chlorine gas.

(e) The chlorinator must be designed so that leaking chlorine gas will be vented to the out-of- doors.

(f) The chlorinator must be a solution feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas to the atmosphere. Injector water must be furnished from the pool circulation system with necessary water pressure increases supplied by a booster pump. The booster must be interlocked with both the pool circulation pump and with a flow switch on the return line.

(g) Chlorine feed lines may not carry pressurized chlorine gas.

(h) The operator shall keep an unbreakable bottle of ammonium hydroxide, of approximately 28 percent solution in water, readily available for chlorine leak detection.

(i) A self-contained breathing apparatus approved by NIOSH for entering environments that are immediately dangerous to life or health must be available and must have a minimum capacity of fifteen minutes.

(j) The breathing apparatus must be kept in a closed cabinet located outside of the room in which the chlorinator is maintained, and must be accessible without use of a key or lock combination.

(k) The facility operator shall demonstrate to the local health department through training documentation, that all persons who operate, or handle gas chlorine equipment, including the equipment specified in Subsections R392-203-21(3)(h) and (i) are knowledgeable about safety and proper equipment handling practices to protect themselves, staff members, and the public from accidental exposure to chlorine gas.

1 scissors;

1 tweezers;

6 pairs disposable medical exam gloves; and

Assorted types and sizes of the following: self adhesive bandages, compresses, roller type bandages and bandage tape.

(a) The operator shall keep the first-aid kit filled, available, and ready for use.

(4) Lifesaving equipment must be mounted in readily accessible, conspicuous places around the pool deck. The operator shall maintain it in good repair and operable condition. The operator and lifeguards shall prevent the removal of lifesaving equipment or use of it for any reason other than its intended purpose.

(5) Where no lifeguard service is provided in accordance with Subsection R392-302-30(2), a warning sign must be placed in plain view and shall state: WARNING - NO LIFEGUARD ON DUTY and BATHERS SHOULD NOT SWIM ALONE, with clearly legible letters, at least 4 inches high, 10.16 centimeters. In addition, the sign must also state CHILDREN 14 AND UNDER SHOULD NOT USE POOL WITHOUT RESPONSIBLE ADULT SUPERVISION.

(6) Where lifeguard service is required, the facility must have a readily accessible area designated and equipped for emergency first aid care.

TABLE 2

Safety Equipment and Signs

	POOLS WITH LIFEGUARD	POOLS WITH NO LIFEGUARD
Elevated Station	1 per 2,000 sq. ft., 185 sq. meters, of pool area or fraction	None
Backboard	1 per facility	None
Room for Emergency Care	1 per facility	None
Ring Buoy with an attached rope equal in length to the maximum width of the pool plus 10 feet, 3.05 meters	1 per 2,000 sq. ft., 185 sq. meters, of pool area or fraction	1 per 2,000 sq. ft., 185 sq. meters, of pool area or fraction
Rescue Tube	1 per 2,000	None

power service is routed under a pool or within the area extending 5 feet, 1.52 meters, horizontally from the inside wall of the pool, except in the following circumstances;

(i) For underwater lighting,

(ii) electrically powered automatic pool shell covers, and

(iii) competitive judging, timing, and recording apparatus.

(5) Buildings containing indoor pools, pool equipment rooms, access spaces, bathhouses, dressing rooms, shower rooms, and toilet spaces must be ventilated in accordance with American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 62.1-2004, which is incorporated and adopted by reference.

R392-302-24. Dressing Rooms.

(1) The operator shall maintain all areas and fixtures within dressing rooms in an operable, clean and sanitary condition. Dressing rooms must be equipped with minimum fixtures as required in Subsection R392-302-25(1). The local health department may exempt any bathers from the total number of bathers used to calculate the fixtures required in Subsection R392-302-25(1) who have private use fixtures available within 150 feet, 45.7 meters of the pool.

(2) A separate dressing room with required shower areas must be provided for each sex. The entrances and exits must be designed to break the line of sight into the dressing areas from other locations.

(3) Dressing rooms must be constructed of materials that have smooth, non-slip surfaces, and are impervious to moisture.

(4) Floors must slope to a drain and be constructed to prevent accumulation of water.

(5) Carpeting may not be installed on dressing room floors.

(6) Junctions between walls and floors must be coved.

(7) Partitions between dressing cubicles must be raised at least 10 inches, 25.4 centimeters, above the floor or must be placed on continuous raised masonry or concrete bases at least 4 inches, 10.16 centimeters, high.

(8) Lockers must be set either on solid masonry bases 4 inches, 10.16 centimeters, high or on legs elevating the bottom locker at least 10 inches, 25.4 centimeters, above the floor.

(a) Lockers must have louvers for ventilation.

(6) Fixtures must be designed so that they may be readily cleaned. Fixtures must withstand frequent cleaning and disinfecting.

(7) At least one covered waste can must be provided in each restroom.

R392-302-26. Visitor and Spectator Areas.

(1) Visitors, spectators, or animals may not be allowed within 10 feet, 3.05 meters, of the pool. Service animals are exempt from this requirement.

(2) Food or drink is prohibited within ten feet, 3.05 meters, of the pool. Beverages must be served in non-breakable containers.

(3) Trash containers must be provided in visitor and spectator areas. The entire area must be kept free of litter and maintained in a clean, sanitary condition.

R392-302-27. Disinfection and Quality of Water.

(1) Disinfection Process.

(a) A pool must be continuously disinfected by a process which:

(i) Is registered with the United States Environmental Protection Agency as a disinfecting process or disinfectant product for water;

(ii) Imparts a disinfectant residual which may be easily and accurately measured by a field test procedure appropriate to the disinfectant in use;

(iii) Is compatible for use with other chemicals normally used in pool water treatment;

(iv) Does not create harmful or deleterious effects on bathers if used according to manufacturer's specifications; and

(v) Does not create an undue safety hazard if handled, stored and used according to manufacturer's specifications.

(b) The active disinfecting agent used must meet the concentration levels listed in Table 6 for all circumstances, bather loads, and the pH level of the water.

(2) Testing Kits.

(a) An easy to operate pool-side disinfectant testing kit, compatible with the disinfectant in use and accurate to within 0.5 milligrams per liter, must be provided at each pool.

(d) The local health departments may grant exemption to the pool water temperature requirements for a special purpose pool including a cold plunge pool, but may not exempt maximum hot water temperatures for a spa pool.

TABLE 5

CHEMICAL VALUES AND FORMULA FOR CALCULATING SATURATION INDEX

The formula for calculating the saturation index is:
SI = pH + TF + CF + AF - TDSF
SI means saturation index
TF means temperature factor
CF means calcium factor
mg/l means milligrams per liter
deg F means degrees Fahrenheit
AF means alkalinity factor
TDSF means total dissolved solids factor.

Temperature		Calcium Hardness		Total Alkalinity	
deg. F	TF	mg/l	CF	mg/l	AF
32	0.0	25	1.0	25	1.4
37	0.1	50	1.3	50	1.7
46	0.2	75	1.5	75	1.9
53	0.3	100	1.6	100	2.0
60	0.4	125	1.7	125	2.1
66	0.5	150	1.8	150	2.2
76	0.6	200	1.9	200	2.3
84	0.7	250	2.0	250	2.4
94	0.8	300	2.1	300	2.5
105	0.9	400	2.2	400	2.6
128	1.0	800	2.5	800	2.9

Total Dissolved Solids

mg/l	TDSF
0 to 999	12.1
1000 to 1999	12.2
2000 to 2999	12.3
3000 to 3999	12.4
4000 to 4999	12.5
5000 to 5999	12.55
6000 to 6999	12.6
7000 to 7999	12.65
each additional 1000, add	.05

If the SATURATION INDEX is 0, the water is chemically in balance.
If the INDEX is a minus value, corrosive tendencies are indicated.
If the INDEX is a positive value, scale-forming tendencies

residual, milligrams
per liter)

Note (1): Minimum Value

(5) Pool Water Sampling and Testing.

(a) At the direction of the Local Health Officer, the pool operator or a representative of the local health department shall collect a pool water sample from each public pool at least once per month or at a more frequent interval as determined by the Local health Officer. A seasonal public pool during the off season and any public pool while it is temporarily closed, if the pool is closed for an interval exceeding half of that particular month, are exempt from the requirement for monthly sampling. The operator or local health department representative shall submit the pool water sample to a laboratory approved under R444-14 to perform total coliform and heterotrophic plate count testing.

(b) The operator or local health department shall have the laboratory analyze the sample for total coliform and heterotrophic plate count using methods allowed under R444-14-4.

(c) If the operator submits the sample as required by local health department, the operator shall require the laboratory to report sample results within five working days to the local health department and operator.

(d) A pool water sample fails bacteriological quality standards if it:

(i) Contains more than 200 bacteria per milliliter, as determined by the heterotrophic plate count or

(ii) Shows a positive test for presence of coliform or contains more than 1.0 coliform organisms per 100 milliliters.

(e) Not more than 1 of 5 samples may fail bacteriological quality standards. Failure of any bacteriological water quality sample shall require submission of a second sample within one lab receiving day after the sample report has been received.

R392-302-28. Cleaning Pools.

(1) The operator shall clean the bottom of the pool as often as needed to keep the pool free of visible dirt.

(2) The operator shall clean the surface of the pool as often as needed to keep the pool free of visible scum or floating matter.

taken. The plan shall also specify who is responsible to take and record the measurements.

(4) If the public pool water samples required in Section R392-302-27(5) fail bacteriological quality standards as defined in Section R392-302-27(5), the local health department shall require the public pool owner and qualified operator to develop an acceptable plan to correct the problem. The local health department may require more frequent water samples, additional training for the qualified operator and also may require that:

(a) the pool operator measure and record the level of disinfectant residuals, pH, and pool water temperature four times a day (if oxidation reduction potential technology is used in accordance with this rule, the local health department may reduce the water testing frequency requirement) or

(b) the pool operator read flow rate gauges and record the pool circulation rate four times a day.

(5) Bather load must be limited if necessary to insure the safety of bathers and pool water quality as required in Section R392-302-27.

(6) A sign must be posted in the immediate vicinity of the pool stating the location of the nearest telephone and emergency telephone numbers which shall include:

(a) Name and phone number of nearest police, fire and rescue unit;

(b) Name and phone number of nearest ambulance service;

(c) Name and phone number of nearest hospital.

(7) If a telephone is not available at poolside, emergency telephone numbers must be provided in a form that can be taken to a telephone.

R392-302-30. Supervision of Bathers.

(1) Access to the pool must be prohibited when the facility is not open for use.

(2) Lifeguard service must be provided at a public pool if direct fees are charged or public funds support the operation of the pool. If a public pool is normally exempt from the requirement to provide lifeguard services, but is used for some purpose that would require lifeguard services, then lifeguard services are required during the period of that use. For other pools, lifeguard service must be provided, or signs must be clearly posted indicating that lifeguard service is not provided.

(3) A lifeguard must meet each of the following:

(f) The lifeguards and operator shall only allow diaper changing in restrooms or changing stations not at poolside. The person or persons who change the diaper must wash their hands thoroughly with soap before returning to the pool. The diapered person must undergo a cleansing shower before returning to the pool.

R392-302-31. Special Purpose Pools.

(1) Special purpose pools must meet all applicable requirements of all Sections of R392-302 in addition to those of this Section as they apply to special design features and uses of special purpose pools.

(a) Special purpose pool projects require consultation with the local health department having jurisdiction in order that consideration can be given to areas where potential problems may exist and before deviations from some of the requirements are approved.

(b) The local health officer shall require such measures as deemed necessary to assure the health and safety of special purpose pool patrons.

(2) Spa Pools.

(a) This subsection supercedes R392-302-6(5). A spa pool shell may be a color other than white or light pastel.

(b) Spa pools shall meet the bather load requirement of R392-302-7(1)(a).

(c) A spa pool may not exceed a maximum water depth of 4 feet, 1.22 meters. The department may grant exceptions to the maximum depth requirement for a spa pool designed for special purposes, such as instruction, treatment, or therapy.

(d) This subsection supercedes R392-302-12(1)(f). A spa pool may be equipped with a single entry/exit. A spa pool must be equipped with at least one handrail for each 50 feet, 15.24 meters, of perimeter, or portion thereof, to designate the point of entry and exit. Points of entry and exit must be evenly spaced around the perimeter of the spa pool and afford unobstructed entry and egress.

(e) This subsection supercedes R392-302-12(3)(c). In a spa pool where the bottom step serves as a bench or seat, the bottom riser may be a maximum of 14 inches, 35.56 centimeters.

(f) This subsection supercedes R392-302-13(1). A spa pool must have a continuous, unobstructed deck at least 3 feet, 91.44 centimeters, wide around 25 percent or more of the spa.

(g) This subsection supercedes R392-302-13(5). The department may allow spa decks or steps made of sealed, clear-heart redwood.

(q) The maximum water temperature for a spa pool is 104 degrees Fahrenheit, 40 degrees Celsius.

(r) A spa pool shall meet the total alkalinity requirements of R392-302-27(3)(d).

(s) A spa pool must have an easily readable caution sign mounted adjacent to the entrance to the spa or hot tub which contains the following information:

(i) The word "caution" centered at the top of the sign in large, bold letters at least two inches in height.

(ii) Elderly persons and those suffering from heart disease, diabetes or high blood pressure should consult a physician before using the spa pool.

(iii) Persons suffering from a communicable disease transmissible via water may not use the spa pool. Persons using prescription medications should consult a physician before using the spa.

(iv) Individuals under the influence of alcohol or other impairing chemical substances should not use the spa pool.

(v) Bathers should not use the spa pool alone.

(vi) Pregnant women should not use the spa pool without consulting their physicians.

(vii) Persons should not spend more than 15 minutes in the spa in any one session.

(viii) Children under the age of 14 must be accompanied and supervised by at least one responsible adult over the age of 18 years, when lifeguards are not on duty.

(ix) Children under the age of five years are prohibited from bathing in a spa or hot tub.

(x) Running or engaging in unsafe activities or horseplay in or around the spa pool is prohibited.

(t) Water jets and air induction ports on spa pools must be controlled by an automatic timer which limits the duration of their use to 15 minutes per each cycle of operation. The operator shall mount the timer switch in a location which requires the bather to exit the spa before the timer can be reset for another 15 minute cycle or part thereof.

(3) Wading Pools.

(a) Wading pools shall be separated from other pools. Wading pools may not share common circulation, filtration, or chemical treatment systems, or walls.

(b) A wading pool may not exceed a maximum water depth of 2 feet, 60.96 centimeters.

(i) The flumes within enclosed slides must be designed to prevent accumulation of hazardous concentrations of toxic chemical fumes.

(ii) All curves, turns, and tunnels within the path of a slide flume must be designed so that body contact with the flume or tunnel does not present an injury hazard. The slide flume must be banked to keep the slider's body safely inside the flume.

(iii) The flume must be free of hazards including joints and mechanical attachments separations, splinters, holes, cracks, or abrasive characteristics.

(iv) Wall thickness of flumes must be thick enough so that the continuous and combined action of hydrostatic, dynamic, and static loads and normal environmental deterioration will not cause structural failures which could result in injury. The facility operator or owner shall insure that repairs or patchwork maintains original designed levels of safety and structural integrity. The facility operator or owner shall insure that repairs or patchwork is performed in accordance with manufacturer's guidelines.

(v) Multiple-flume slides must have parallel exits or be constructed, so that the projected path of their centerlines do not intersect within a distance of less than 8 feet, 2.44 meters, beyond the point of forward momentum of the heaviest bather permitted by the engineered design.

(vi) A slide flume exit must provide safe entry into the splash pool. Design features for safe entry include a water backup, and a deceleration distance adequate to reduce the slider's exit velocity to a safe speed. Other methods may be acceptable if safe exiting from the slide flume is demonstrated to the department.

(b) Flume Clearance Distances.

(i) A distance of at least 4 feet, 1.22 meters, must be provided between the side of a slide flume exit and a splash pool side wall.

(ii) The distance between nearest sides of adjacent slide flume exits must be at least 6 feet, 1.83 meters.

(iii) A distance between a slide flume exit and the opposite end of the splash pool, excluding steps, must be at least 20 feet, 6.10 meters.

(iv) The distance between the side of the vehicle flume exit and the pool side wall must be at least 6 feet, 1.83 meters.

(v) The distance between nearest sides of adjacent vehicle slide flume exits must be at least 8 feet, 2.44 meters.

(vi) The distance between a vehicle slide flume exit and the opposite end of the splash pool, excluding steps, must be long enough to provide clear, unobstructed travel for at

(iii) Splash pool overflow reservoirs must circulate water through the water treatment system and return when flume supply service pumps are turned off.

(iv) Flume pumps and motors must be sized, as specified by the flume manufacturer, and must meet all National Sanitation Foundation, NSF/ANSI 50-2007, Section 6. Centrifugal Pumps, standards for pool pumps.

(v) Flume supply service pumps must have check valves on all suction lines.

(vi) The splash pool and the splash pool overflow reservoir must be designed to prohibit bather entrapment as water flows from the splash pool to the overflow reservoir.

(vii) Perimeter overflow gutter systems must meet the requirements of Section R392-302-19, except that gutters are not required directly under slide flumes or along the weirs which separate splash pools and splash pool overflow reservoirs.

(viii) Pump reservoir areas must be accessible for cleaning and maintenance.

(f) Caution Signs.

(i) A caution sign must be mounted adjacent to the entrance to a water slide that states at least the following warnings:

(A) The word caution centered at the top of the sign in large bold letters at least two inches in height.

(B) No running, standing, kneeling, tumbling, or stopping on flumes or in tunnels.

(C) No head first sliding at any time.

(D) The use of a slide while under the influence of alcohol or impairing drugs is prohibited.

(E) Only one person at a time may travel the slide.

(F) Obey instructions of lifeguards and other staff at all times.

(G) Keep all parts of the body within the flume.

(H) Leave the splash pool promptly after exiting from the slide.

(7) Interactive Water Feature Requirements.

(a) All parts of the interactive water feature shall be designed, constructed, maintained, and operated so there are no slip, fall, or other safety hazards, and shall meet the standards of the construction code adopted by the Utah Legislature under Section 58-

(iii) The interactive water feature circulation system shall be on a separate loop and not directly interconnected with the interactive water feature pump.

(iv) The suction intake of the interactive water feature pump in the underground reservoir shall be located adjacent to the circulation return line and shall be located to maximize uniform circulation of the tank.

(v) An automated water level controller shall be provided for the interactive water feature, and the drinking water line that supplies the feature shall be protected from any back flow by an air gap.

(vi) The water velocity through the feature nozzles of the interactive water features shall meet manufacturer's specifications and shall not exceed 20 feet per second.

(vii) The minimum size of the interactive water feature sump or collector tank shall be equal to the volume of 3 minutes of the combined flow of all feature pumps and the filter pump. Access lids or doors shall be provided to the sump and collector tank. The lids or doors shall be sized to allow easy maintenance and shall provide security from unauthorized access. Stairs or a ladder shall be provided as needed to ensure safe entry into the tank for cleaning and inspection.

(viii) The suction intake from the interactive water feature circulation pump shall be located in the lowest portion of the underground reservoir.

(ix) A means of vacuuming and completely draining the interactive water feature tank shall be provided.

(j) An interactive water feature is exempt from:

(i) The wall requirement of section R392-302-10;

(ii) The ladder, recessed step, stair, and handrail requirements of section R392-302-12;

(iii) The fencing and access barrier requirements of section R392-302-14;

(iv) The outlet requirements of section R392-302-18;

(v) The overflow gutter and skimming device requirements of section R392-302-19;

(vi) The safety and lifesaving requirements of section R392-302-22, except that an interactive water feature shall be equipped with a first aid kit as required by subsection R392-302-22(3);

(vii) The dressing room requirements of section R392-302-24 as long toilets, lavatories and changing tables are available within 150 feet; and

(b) The body of the notice sign shall be in upper case letters at least 1.0 centimeters high and include the following four bulleted statements in black letters:

-All with diarrhea in the past 2 weeks shall not use the pool.

-All users must shower with soap to remove all fecal material prior to pool entry and after using the toilet or a diaper change.

-All less than 3 yrs or who wear diapers must wear a swim diaper and waterproof swimwear. Diapers may only be changed in restrooms or changing stations.

-Keep pool water out of your mouth.

(3) If a cryptosporidium warning has been issued, each operator of a public pool subject to the warning shall, at a minimum, implement the following cryptosporidium counter measures:

(a) maintain the disinfectant concentration within the range between two mg/l (four mg/l for bromine) and the concentration listed on the product's Environmental Protection Agency mandated label as the maximum reentry concentration, but in no case more than five mg/l (10 mg/l for bromine);

(b) maintain the pH between 7.2 and 7.5; and

(c) maintain the cyanuric acid level that meets the requirement of R392-302-27(3), except the maximum level shall be reduced to 30 mg/l.

(4)(a) If a cryptosporidium warning has been issued, in addition to the requirements listed in R392- 302-33(3), the owner or operator of a public pool shall implement any additional cryptosporidium countermeasures listed in subsection below sufficient to achieve at least a 99.9 percent destruction or removal of cryptosporidium oocysts twice weekly, except as provided in R392-302-33(4)(b).

(b) Hyperchlorination using sodium hypochlorite or calcium hypochlorite to achieve a concentration multiplied by time (CT) value of 15,300 mg/l minutes. Table 7 lists examples of chlorine concentrations and time periods that may be used to achieve the required CT value. The operator shall not allow anyone to use the pool if the chlorine concentration exceeds the Environmental Protection Agency maximum reentry concentration listed on the product's label, but in no case if the concentration exceeds five mg/l. The operator of any public pool not required to have a lifeguard by R392-302-30(2) shall hyperchlorinate at least once weekly.

(c) A full flow ultraviolet treatment system that meets the requirements of National Sanitation Foundation standard NSF/ANSI 50-2007, which is incorporated by reference. The owner or operator shall ensure that the system is installed and operated according to the manufacturer's recommendations. The owner or operator shall obtain from the

(6) If the Executive Director or local health officer determines that a pool is a cryptosporidiosis threat to public health, he may order the pool to close. The owner or operator of the pool may not reopen until the person issuing the order has rescinded it.

Utah Administrative Code

The Utah Administrative Code is the body of all effective administrative rules as compiled and organized by the Division of Administrative Rules (Subsection 63G-3-102(5); see also Sections 63G-3-701 and 702).

NOTE: For a list of rules that have been made effective since July 1, 2013, please see the codification segue page.

NOTE TO RULEFILING AGENCIES: Use the RTF version for submitting rule changes.

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R392. Health, Disease Control and Prevention, Environmental Services.

Rule R392-303. Public Geothermal Pools and Bathing Places.

As in effect on July 1, 2013

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or overnight lodging purposes. Living units include motel and hotel rooms, condominium units, travel trailers, recreational vehicles, mobile homes, single family homes, and individual units in a multiple unit housing complex.

(9) "Local Health Officer" means the health officer of the local health department having jurisdiction, or his designated representative.

(10) "Natural bathing place" means a lake, pond, river, stream, swimming hole, or hot springs which has not been modified by man.

(11) "Semi-artificial bathing place" means a natural bathing place that has been modified by man.

R392-303-3. General Requirements.

(1) This rule applies to geothermal pools and geothermal bathing places that:

(a) are partially or completely filled with geothermal water that has a source temperature of at least 70 degrees Fahrenheit, 21.1 degrees Celsius; and

(b) are offered to the public for bathing or recreation.

(2) This rule does not apply to an unsupervised geothermal bathing place that the owner explicitly or tacitly allows anyone at any time to use without a fee.

(3) This rule does not apply to a geothermal pool or geothermal bathing place that is used only by a single household or only by a single group of multiple living units of four or fewer households.

(4) Except as otherwise stated in this rule, geothermal pools and geothermal bathing places , are exempt from the requirements of R392-302.

(5) This rule does not require an owner or operator to modify any portion of an existing geothermal pool facility or existing geothermal bathing place. If an owner or operator modifies any system or part of a geothermal pool or geothermal bathing place, the modified system or part must meet the requirements of this rule. However, if the Executive Director or the Local Health Officer determines that any facility is dangerous, unsafe, unsanitary, or a nuisance or menace to life, health or property, the Executive Director or the Local Health Officer may order modification consistent with the requirements of this rule.

R392-303-4. Drinking Water Supply.

(1) The owner of a geothermal pool or geothermal bathing place shall assure that all plumbing fixtures including drinking fountains, lavatories and showers at the public

not meet the EPA standard and that there may be a health risk associated with bathing in water that contains high levels of the constituent. Based on research funded by or guidelines issued by a competent authority, including the Centers for Disease Control and Prevention or the Environmental Protection Agency, the Local Health Officer may require the operator to post the maximum recommended bathing period or to post other recommended restrictions.

TABLE 1

Geothermal Source Water Constituents

Constituent	Maximum	Minimum
pH	8.0	7.0
Fluoride	4.0 milligrams per liter	None
Nitrate	10 milligrams per liter	None
Nitrite	1 milligrams per liter	None
Antimony	0.006 milligrams per liter	None
Arsenic	0.010 milligrams per liter	None
Barium	2 milligrams per liter	None
Beryllium	0.004 milligrams per liter	None
Cadmium	0.005 milligrams per liter	None
Chromium	0.1 milligrams per liter	None
Copper	1.3 milligrams per liter	None
Cyanide (as free cyanide)	0.2 milligrams per liter	None
Lead	0.015 milligrams per liter	None
Mercury	0.002 milligrams per liter	None
Selenium	0.05 milligrams per liter	None
Thallium	0.002 milligrams per liter	None

R392-303-6. General Safety Requirements.

(1) Geothermal pools shall meet the requirements of R392-302-11.

(2) Head-first entry is not permitted at a geothermal bathing place except where the operator has demonstrated to the local health officer that the water depth and underwater obstructions at the entire geothermal bathing place pose no greater risk than at a diving-permitted section of a swimming pool as allowed in R392-302-11. Diving with a self-contained underwater breathing apparatus (SCUBA) is allowed at geothermal bathing places. Where head-first entry is not permitted, the operator shall place a sign that states "NO HEAD-FIRST ENTRY" in accordance with R392-303-22, 23 and 24.

(3) Geothermal pools and geothermal bathing places shall meet the following sections of R392-302:

(1) With the exception of the provisions listed in R392-302-8(3) and R392-302-8(5), geothermal pools shall meet the provisions of R392-302-8.

(2) The owner shall submit plans for a new geothermal pool or a geothermal bathing place or the renovation or the remodeling of a geothermal pool or a geothermal bathing place to the local health department for approval based upon compliance to this rule. Renovation or remodeling includes the replacement or modification of equipment that may affect the ability of a geothermal pool or a geothermal bathing place to meet the safety and water quality standards of this rule.

(3) Geothermal bathing places used only for SCUBA diving or snorkeling are exempt from requirements of R392-303-11 through 15 and the clarity requirement in R392-303-19 if each patron signs a document acknowledging that the patron has read the list of inherent physical and environmental dangers that the geothermal bathing place has not complied with in R392-303-11 through 15 and 19, and to which the patron is exposed upon entering or using the geothermal bathing place.

R392-303-11. Depths and Floor Slopes.

(1) Geothermal pools shall meet the requirements of R392-302-9.

(2) The owner of a geothermal bathing place shall protect bathers from uneven bottoms, sudden changes in depth, and other bottom anomalies by altering the pool bottom, posting signs about the dangers, providing barriers around hazards, or roping off areas.

R392-303-12. Walls.

(1) Geothermal pools shall meet the requirements of R392-302-10.

(2) The owner of a geothermal bathing place shall protect bathers from uneven walls, submerged projections, or submerged ledges by methods such as posting signs notifying patrons of the dangers, providing barriers around hazards, or roping off areas,

R392-303-13. Ladders, Recessed Steps, and Stairs.

(1) Geothermal pools shall meet the requirements of R392-302-12.

(2) The owner of a geothermal bathing place shall provide a means of entrance into and exit from the water that include handholds and steps where needed to provide for bather safety.

R392-303-14. Decks and Walkways.

(1) Geothermal pools shall meet the requirements of R392-302-13.

(c) If the operator of a geothermal bathing place is unable to control the flow-through rate, the operator may meet the bacteriologic water quality standards in section R392-303-19 by controlling bather load.

(d) If the operator of a geothermal pool maintains the disinfectant levels, chloramine levels, and pH levels within the values allowed in Table 6 of R392-302 and operates a recirculation system in the pool in compliance with the requirements of R392-302-16, the pool is exempt from the flow-through rate requirements of R392-303-16(3) except the operator shall maintain a flow-through with a maximum turnover time of 48 hours, and shall meet the bacteriologic requirements of R392-302-27(10)(a).

(4) A geothermal pool that has pumped flow shall meet the inlet requirements of R392-302-17. Geothermal bathing places and geothermal pools that have gravity flow inlets, shall either meet the requirements of R392- 302-17 or the owner or operator of the pool shall demonstrate to the local health department that the inlet system provides uniform distribution of fresh water throughout the pool. A demonstration of uniform distribution includes computer simulation or a dye test witnessed by a representative of the local health department.

(5) A geothermal pool shall have a drain that allows complete emptying of the pool. Geothermal pool and geothermal bathing place submerged drain grates and covers shall meet the requirements of R392-302-18. Geothermal pool and geothermal bathing place submerged drains shall meet the anti-entrapment requirements of R392-302-18.

(6) A geothermal pool shall have overflow gutters or skimming devices that meet the applicable requirements of R392-302-19.

(7) Geothermal pools and geothermal bathing places shall have a method to determine accurate rate-of- flow in gallons per minute. If the rate-of-flow method is a rate-of flow indicator manufactured by a third party, it shall be properly installed and located according to the manufacturer's recommendations. If a field-fabricated rate-of-flow indicator such as a calibrated weir or flume is used, it shall be designed and calibrated under the direction of a licensed professional engineer. The rate-of-flow indicator must be located in a place and positioned where it can be easily read by the operator as required in R392-303-21(2). The Local Health Officer may exempt a geothermal pool or geothermal bathing place from the requirement for a rate-of-flow indicator if the rate of flow is not adjustable or if there is no practical way to measure flow.

(8) Each geothermal pool and geothermal bathing place shall have a temperature measuring device. The operator shall measure the temperature of the pool at the warmest point. The device shall be accurate to within one degree Fahrenheit (0.6 degrees Celsius). The operator shall calibrate the thermometer in accordance with the manufacturer's specifications as necessary to ensure its accuracy.

R392-303-17. Filtration.

(4) If E. coli or fecal coliform levels are greater than one per 50 milliliters, the pool operator shall post the level found as required in R392-303-22.

(5) The owner or operator of a geothermal pool or geothermal bathing place should maintain the pool water temperature at a maximum of 104 degrees Fahrenheit, 40 degrees Celsius. A geothermal pool or geothermal bathing place that exceeds 104 degrees Fahrenheit, 40 degrees Celsius, at the minimum required turnover rate shall have, and employ when necessary, a method of temperature reduction in the pool or bathing place that maintains the minimum flow-through rate required under R392-303-16(3). An approved method of temperature reduction may include methods such as the introduction of cool water from a source that has been analyzed and approved according to R392-303-5(2) or approved for drinking water by the Utah Division of Drinking Water, or such as the direct cooling of the geothermal source water by a heat exchanger, or the diversion of the geothermal source water to allow it to cool prior to entering the pool or impoundment. The temperature reduction method shall be capable of reducing the temperature of the pool within 2 hours of activation from the maximum anticipated temperature to below 104 degrees Fahrenheit, 40 degrees Celsius. If the temperature of the source water or cooling rate of the pool is difficult to control, a temperature drift of up to four degrees Fahrenheit, 2.2 degrees Celsius, is allowed if the owner or operator has activated the temperature reduction measure. The owner or operator of a geothermal pool or geothermal bathing place shall not permit bathers to use the pool if the temperature is above 108 degrees Fahrenheit, 42.2 degrees Celsius, except the owner may allow a bather to use a soaking tub or similar fixture with a volume of 70 gallons or less and a water temperature less than or equal to 110 degrees Fahrenheit, 43.3 degrees Celsius.

R392-303-20. Cleaning Pools.

(1) The owner or operator of a geothermal pool shall remove any visible dirt on the bottom of the pool at least once every 24 hours or more frequently as needed to keep the pool free of dirt and debris.

(2) The owner or operator of a geothermal pool or geothermal bathing place shall clean the water surface of the pool as often as needed to keep the pool free of scum or floating matter.

(3) The owner or operator of a geothermal pool shall keep pool surfaces, decks, handrails, floors, walls, and ceilings of rooms enclosing pools, dressing rooms and equipment rooms clean, sanitary, and in good repair. The owner or operator of a geothermal bathing place shall keep handholds, handrails, entrance points, walkways, dressing rooms, and equipment rooms clean and in good repair.

R392-303-21. Supervision of Pools and Bathing Places.

(2) If a geothermal pool or geothermal bathing place is operated at a temperature greater than or equal to 100 degrees Fahrenheit, 37.8 degrees Celsius, the operator shall post a separate caution sign that includes the following bulleted points:

-POOL WATER MAY EXCEED 100 DEGREES F. (37.8 DEGREES C.)

-CONSULT A PHYSICIAN IF YOU: ARE ELDERLY OR PREGNANT; HAVE HEART DISEASE, DIABETES, OR HIGH BLOOD PRESSURE; OR USE PRESCRIPTION MEDICATION

-DO NOT USE POOL IF ALONE OR UNDER THE INFLUENCE OF ANY IMPAIRING SUBSTANCE

-DO NOT USE POOL FOR MORE THAN 15 MINUTES AT A TIME

-CHILDREN UNDER 5 ARE PROHIBITED; CHILDREN UNDER 14 MUST BE WITH A PERSON OVER 18 YEARS

(3) Except at a geothermal pool or a geothermal bathing place where head-first entry is permitted, the operator shall post a warning sign that states, "NO HEAD-FIRST ENTRY" in accordance with R392-303-23 and 24.

(4) If the geothermal pool or bathing place source water fails any of the standards found in Table 1, the operator shall post a warning sign that states the following:

-POOL WATER DOES NOT MEET EPA DRINKING WATER STANDARDS FOR (the failed constituent or constituents listed in Table 1).

-(The analytical result of each failed constituent and the value of the Table 1 standard that has not been met.) For example: ARSENIC IN THE POOL IS 35 PARTS PER BILLION; EPA STANDARDS ALLOW ONLY 10.

-THERE MAY BE HEALTH RISKS ASSOCIATED WITH BATHING IN THIS WATER.

- USE AT YOUR OWN RISK

R392-303-23. Caution Sign Placement.

(1) The operator of a geothermal pool or geothermal bathing place shall post caution and warning signs that meet the requirements of this rule in conspicuous locations that are in the line of sight of a persons using the premises and readily visible so that all persons are alerted to potential hazards and informed before using the geothermal pool or geothermal bathing place.

(a) The operator shall place the caution sign required in subsection R392-303-22(1) at the reception or sales counter and no more than 10 feet from where a person checks in

(1) The caution sign required by R392-303-22(1) and R392-303-22(2) shall meet the following requirements:

(a) The signs shall be at least 24 inches, 61 centimeters, by 18 inches, 46 centimeters, on a white background. If the sign is larger than 24 inches, 61 centimeters, by 18 inches, 46 centimeters, the sizes of the other elements of the sign shall be proportionally larger.

(b) All lettering shall be in a sans serif font proportional thickness to height so as to be easily readable. Acceptable fonts are arial bold, folio medium, franklin gothic, helvetica, helvetica bold, meta bold, news gothic bold, poster gothic, and universe. In addition, the letters shall be:

(i) black in color;

(ii) capital letters; and

(iii) adequately spaced and not crowded.

(c) There must be a panel at the top of the sign. The background of the panel shall be safety yellow in color and shall:

(i) be at least 3.3 centimeters, high and 44 centimeters wide, including a black line border that is 0.16 centimeters wide surrounding the safety yellow background;

(ii) have the word "CAUTION" in capital letters that are two centimeters high; and

(iii) have an internationally recognized safety alert symbol that is two centimeters high and placed immediately to the left of the word "CAUTION".

(d) The safety alert symbol shall be black with a yellow field.

(e) The word "CAUTION" and the symbol shall be vertically and horizontally centered within the yellow panel.

(f) The letters in the body of the sign shall be legible, at least one centimeter high, and clearly visible.

(g) The body of the sign required in subsection R392-303-22(1) shall list the bulleted statements required in that section.

(h) The body of the sign required in subsection R392-303-22(2) shall list the bulleted statements required in that section.

(2) The warning sign required by R392-303-22(3) and R392-303-22(4) shall meet the following requirements:

A person who violates a provision of this rule is subject to a civil penalty of up to $10,000 for each offense as provided in Section 26-23-6.